[0016] (Amended)For illustration purposes, the IMUXs 20 and 22 are shown coupled by the physical communication links 28a-*n* that are T1 or DS1 links, which carry bi-directional format data streams. Each link 28 carries data streams in either direction at a specified rate, which depends on the links characteristics. In the illustrative example, each of the links 28a-*n* carries one DS1 data stream 30a-*n* in one direction and another DS1 data stream 32a-*n* in the other direction. In discussing the capacity of each link to carry information, the term's data rate, bit rate, and bandwidth are used interchangeably to indicate capacity to carry information. In other embodiments, data streams of different rates and formats, such as a DSL on E1, may be utilized. The channel 23 is used for communication between the IMUX 20 and the IMUX 22 information related to the optimal rate prior to training of the links 28.

REMARKS

The above amendments have added no new matter to the application.

Respectfully submitted,

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Version with Markings to Show Changes Made

[0011] (Amended)A system and method are provided for determining link characteristics in order to calculate the optimal data rate [because of a link failure]. The system includes a first unit at a first location coupled to one end of each of a plurality of low capacity data links for assisting in determining the characteristics of each of the links using a test signal transmitted over each of the links, a second unit at the second location coupled to the other end of each of the links for assisting in determining the characteristics of each of the links based on the characteristics of the test signal received at the second unit, and a processor coupled to the second unit for determining the optimal transmission rate based on the characteristics of the links and the number of links needed to provide the desired transmission rate.

[0016] (Amended)For illustration purposes, the IMUXs 20 and 22 are shown coupled by the physical communication links 28a-*n* that are T1 or DS1 links, which carry bi-directional format data streams. Each link 28 carries data streams in either direction at a specified rate, which depends on the links characteristics. In the illustrative example, each of the links 28a-*n* carries one DS1 data stream 30a-*n* in one direction and another DS1 data stream 32a-*n* in the other direction. In discussing the capacity of each link to carry information, the term's data rate, bit rate, and bandwidth are used interchangeably to indicate capacity to carry information. In other embodiments, data streams of different rates and formats, such as a[n] DSL on E1, may be utilized. The channel 23 is used for communication between the IMUX 20 and the IMUX 22 information related to the optimal rate prior to training of the links 28.